

**BOOK REVIEW: *Poliomyelitis: Newark 1916 “The Grip of Terror”***

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Prior to the advent of effective vaccines, during the last mid-century, poliomyelitis caused widespread public dread. So, too, did the disease produce consternation for health care workers challenged to address its devastating effects. Just over 100 years ago, an epidemic of poliomyelitis—then known as infantile paralysis—caused disruption and death in the lives of many, but especially to those in Newark, NJ, said to have been, on a per capita basis, the hardest hit of any American city.

Sandra Moss, a retired internist and notable medical historian, here offers the reader an extensively researched and compellingly written examination of the events surrounding this epidemic and the actions taken by distraught citizens and by a medical profession with incomplete knowledge and virtually no effective therapeutic options.

In a well-organized and historically-accurate manner, Moss explores the beginnings of the 1916 epidemic that ultimately affected many thousands of children and young adults and caused a mortality rate that approached 25%. She refers to the “Newark trajectory,” showing the statistically alarming growth of the epidemic and the public health measures taken at the time to address this major population hazard. The author stirringly describes the contentious and vexing debates that surrounded the relevant issues: whether and how to enforce quarantines, the manner in which public gatherings should or would be limited, methods of dealing with those who chose not to cooperate with recommended procedures, and so on.

The controversies are highlighted by the fraught relationship between Charles Craster, MD, and William S. Disbrow, MD. Craster, the chief officer of the Newark Board of Health, advocated for strong action, including precise case reporting, isolation and quarantine of affected individuals and their families, and fumigation as essential elements of the public response; opposing him was Disbrow, President of the Newark Board of Health and a pathologist at Saint Barnabas Hospital, who regarded Craster as an alarmist and viewed the matter as “nothing more than a ‘scare.’” To his credit, however, Disbrow is later described as establishing an information bureau to provide overwrought parents with reliable advice to deal with the challenges imposed by their children’s illnesses.

Other prominent individuals who were leaders in the community included men like Henry Leber Coit, MD, the founder of Newark’s Babies’ Hospital, who played a critical role in the after-care of polio survivors, but who was opposed to closing schools, clinics, and baby health stations as a means to avoid contagion. Julius Levy, MD, Chief of the Bureau of Child Hygiene, advocated for the adoption of hygienic measures as a means to promote improved sanitation. (*Disclosure: As a youthful teenager in the early 1950s, I had numerous personal encounters with then-retired Dr. Levy, to whom I remain indebted for his encouragement to me to enter the medical profession.*)

Later chapters deal with the difficulties encountered in the diagnosis of cases and the limited methods of treatment available at the time, which included pain control, hydrotherapy, oxygen (iron lungs were not available until later), antisepsis, and removal of a volume of spinal fluid to relieve intracerebral pressure and thereby alleviate cephalgia. Daniel Elliott, MD, treated some 580 patients at Newark City Hospital, of whom 142 died. He regarded most of these treatments as “useless,” with the possible exception of lumbar puncture, which he found to reduce irritability and relieve headaches.

Moss goes on to describe the “nostrums” and “secret preparations” promulgated by certain sectarian physicians or by ignorant or unscrupulous quacks and offered to an anxious public. On a more encouraging note, the author turns her attention to the restorative and rehabilitative measures employed to facilitate recovery from paralysis, to the extent achievable. Notable are the contributions of Edgar Holden, MD, a pediatric orthopedic specialist and hospital consultant, who was in charge of the clinic at the Home for Crippled Children.

In the concluding chapter, Moss asks: “Why did polio create so much terror back in 1916?” At the time, some mothers were said to have expressed their feeling that they would rather have had their children die than to survive as they did, many with severe residual paralysis that led to lifelong disability and dependency. An effective vaccine was not to appear until four decades later. To this day, there is no useful antiviral remedy for poliomyelitis, as there is for human immunodeficiency virus infection. The author provides much “food for thought” in showing how a perplexed public and a sometimes confounded medical profession dealt with the vagaries of a major public health menace at a time of limited insight.

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